AMERICAN JOURNAL OF PHYSICAL ANTHROPOLOGY 105:553–558 (1998)

Book Reviews

A BIOHISTORY OF 19TH-CENTURY AFRICAN AMERICANS: THE BURIAL REMAINS OF A PHILADELPHIA CEMETERY. By Lesley M. Rankin-Hill. Westport, CT: Bergin and Garvey. 1997. 203 pp. ISBN 0-89789-435-9. $59.95 (cloth).

Linking social history with skeletal biology is a complex task. Rankin-Hill endeavors to examine skeletal remains from the early 19th-century First African Baptist Church (FABC), Philadelphia, in light of the resources provided by historical and archival documents, sociological and anthropological studies, and archaeological data. A critical component of the synthetic analysis is the author's adoption of a biocultural approach. The focus of the study is to determine "who the people buried in the First African Baptist Church Cemetery were, and what were the conditions and experiences of their lives" (p. 163).

In Chapter 1 the reader is introduced to the population. A brief history of the congregation and its cemetery is provided along with a mention of the archaeological context. Primarily, however, the chapter focuses on the history of Afro-American research within the fields of anthropology, sociology, and history. Here, Rankin-Hill argues that "despite the diversity of disciplines involved, research on the experience of Afro-Americans in the New World can be characterized as yielding an overproliferation of works but an underdevelopment of approaches and scope" (p. 7). The limiting paradigms employed by biohistorical researchers are discussed very briefly. Last, this chapter recounts the biocultural model proposed by Goodman et al. (1984) and discusses ways in which the model can be applied to this population.

Three sources of information are reviewed in Chapter 2: documentary evidence, demographic analyses (consisting of paleodemographic and historical demographic evidence), and skeletal biological data based on paleopathological and histological methods. Specific historical records such as census data, interment records, and medical historical sources are briefly noted. An introduction to paleodemographic techniques, especially the use of a life table, is also provided. Here, too, the reader finds the paleodemographic results of the FABC population, indicating that 135 individuals were recovered from 144 burials (75 adults and 60 subadults). Pathological conditions are next discussed in detail. The nature, etiologies, and complexities involved in analyzing porotic hyperostosis, periostitis, trauma, degenerative joint disorders, osteophytosis, dental enamel defects, and morphological and histological changes in bone tissue are closely examined. This chapter concludes with a brief overview of results obtained from other skeletal biological studies of Afro-American populations.

An extensive historical background of the skeletal population is provided in Chapter 3. Included in this section is information gleaned from U.S. Census data, the Pennsylvania Abolition Society, and the Society of Friends (Quakers). The sociohistoric data indicates that "African Baptists, in particular, represented the lower end of the socioeconomic scale, with a loss of land ownership, declining total wealth, and reduced access to skilled jobs throughout the period" (p. 68). The implications of these conditions are expected to have affected the lives of the congregation, and in theory will be evident in the skeletal remains they left behind.

Patterns of mortality and health are discussed in Chapter 4. Here the reported causes of death and patterns of mortality for the city of Philadelphia are presented, with care being taken to recognize patterns of socioeconomic and racial bias. From the data, Rankin-Hill predicts that the skeletal population will display: (1) high rates of mortality for infants and females of reproductive age; (2) high frequency rates of enamel defects associated with the presence of fetal, early childhood, and maternal stress; (3) a

high frequency of subadult systemic infection and little to no systemic infection in adults due to the acute nature of 19th-century epidemics; (4) low incidence of severe nutritional disorders, but a higher incidence of marginal nutritional disorders; (5) a high frequency of aggression-caused trauma; and (6) a high frequency of degenerative joint disease due to strenuous labor demands. The results of the paleodemographic analysis suggest that mortality was highest for infants under 12 months and for adults between the ages of 40 and 50 years old. Patterns of mortality were also distinguishable by sex, with the highest proportion of females dying between the ages of 20 and 30 years old, and the highest proportion of males dying between the ages of 40 and 50 years old. Interestingly, the life expectancy rate for the population was significantly higher than that reported by Rose (1985) for a rural Afro-American skeletal population from Arkansas.

The paleopathological analysis is contained in Chapter 5. Here the author discusses taphonomic bias, along with the paleopathological results. She concludes that the relatively high rate of porotic hyperostosis within the skeletal sample indicates the presence of marginal nutrition, not hereditary hemolytic conditions, and possibly is etiologically linked to the presence of infectious agents, as witnessed by the high proportion of adults with both porotic hyperostosis and periostitis. The presence of well-healed traumatic lesions, displaying an age-related pattern, suggests the effects of slavery. As predicted, the population displays high rates of degenerative joint disease. Evidence of childhood growth disruption is also recognizable, with an enormous percentage of the population displaying enamel deformation, and younger-aged individuals displaying lower values of both mean cortical thickness and cortical area.

In the final chapter, the author returns to discuss the implications of the biocultural model. The original model, provided in various forms in Chapters 1, 3, 4, and 5, is now extended to include specific examples of stressors, buffers, resistance factors, and indicators of growth disruption derived specifically from this population. Here, too, the author provides an insight into the "material lives" of Afro-American and FABC men and women, by summarizing the historical data and highlighting details of specific individuals within the population whose records have been preserved. The "material lives" of each individual, asserts the author, greatly affected the health status and mortality of this population.

In summary, the book serves as testimony to the power and promise of the biocultural approach. The author's integration of documentary evidence and skeletal analysis clearly shows that insight into the lives of the "invisible" can be achieved. Although synthesizing historical and skeletal data within a biocultural paradigm is not new, and relatively standard paleodemographic and paleopathological analytical tools are adopted, the author provides the reader with an impressive amount of information. For the professional, the book provides a strong comparative sample from which questions concerning population adaptation can be based. Unexpectedly, I found the questions that were not addressed in the book to be as compelling as my growing understanding of this remarkably complex population. What patterns, for instance, of familial relationships could be teased out from a synthesis of archaeological and nonmetric skeletal data? What role might migration have played in the demographic assessment? And last, what assumptions concerning human adaptation must we begin to test in light of the surprisingly different patterns of mortality and morbidity between the FABC population and other Afro-American populations?

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